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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,479	05/10/2005	Olaf Such	DE 020241	7006
24737 7590 06/02/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
			EXAMINER KAHELIN, MICHAEL WILLIAM	
			ART UNIT 3762	PAPER NUMBER
			MAIL DATE 06/02/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/534,479

**Applicant(s)**

SUCH ET AL.

**Examiner**

MICHAEL KAHLIN

**Art Unit**

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11, 19 and 21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/21/2009 has been entered.

### ***Drawings***

2. The drawings are objected to because the unlabelled boxes in Figure 3 should include descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities: the various sections of the specification are lacking section headings as provided by 37 C.F.R. 1.177.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner was unable to find support in the originally filed disclosure for the “non-planar” claim limitation. Although a specific example of a hemispheric or button-shaped electrode appears to have been disclosed, this does not amount to disclosure of any and all shapes that are not a plane.

Any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. Any

claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement (See MPEP 2173.05(i)).

**6.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**7.** Claims 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**8.** In regards to claim 24, the term "configuration" is vague because it is unclear whether Applicant is claiming an apparatus (or system) comprising the various elements, or merely the "configuration" (or layout) of the elements. The Examiner is interpreting the claim to positively recite and include the physical elements listed, but should be amended accordingly (e.g., an electrode-carrier apparatus or system).

**9.** In regards to claim 25, the "electronic device" is inferentially included, rendering the scope of the claim vague. As no "electronic device" element has been positively set forth in the claim, it is unclear how the electrodes can be "part of" said element. It is suggested to either positively recite additional elements or limit the electrodes themselves. As it appears that no additional elements are set forth in the claim, the Examiner is considering this limitation to require that the electrodes be adapted to be used with an electronic device.

10. In regards to claim 26, the claim further limits "the device," which has not been positively recited in the claim. It is suggested to first set forth the element before it is further limited.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 5-9, 21-26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Granek et al. (US 4,729,377, hereinafter "Granek").

13. In regards to claims 1 and 24, Granek discloses a wearable system for bioelectrical interaction (abstract) comprising a carrier including a first and second side (Fig. 12, element 10), an electronic device arranged to be mounted on the carrier comprising electrodes (element 46 and Fig. 1), wherein the electrodes are shaped to enable fixation of the electrodes on the carrier and at least a portion of the electrode extends through the carrier from the first side to the second side (Fig. 12), the carrier being provided with receiving portions to accommodate the electrodes (the holes through which the electrodes pass, Fig. 12).

14. In regards to claim 2, 25, and 26, the device further comprises electronic means (18) operating with the electrodes in an integrated unit (Fig. 1) arranged to be removably attached to the carrier (col. 5, line 66 to col. 6, line 12). Further, the carrier is made of stretchable Lycra (col. 6, lines 22-25), which would inherently permit the

electrode of Figure 12 to be pulled through the hole in the carrier, or alternatively, scissors could be used to cut away the Lycra carrier, meeting the claim requirement of "removably attached."

15. In regards to claim 5, the electrodes are button-shaped and the receiving portions are notches of suitable dimensions (Fig. 12).

16. In regards to claim 6, the carrier is integrated into clothing (Fig. 1).

17. In regards to claims 7 and 8, the interaction comprises monitoring EKG (col. 5, line 19).

18. In regards to claims 9 and 29, the surface of the electrode is made of a first material (Fig. 12, element 38) and the remainder is made of a second material (46).

19. In regards to claims 21-23, the receiving portions of the carrier (hole through which 46 passes) are disposed between a first portion of the electrode that projects away from the first side (on the same side as 38) and a second portion that projects away from the second side (on the same side as 50) to facilitate a substantially non-planar surface (the entire outer surface of 38) of the electrode portion being brought into contact with the skin (on the side of 38).

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**21.** This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**22.** Claims 3, 10, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granek in view of Chen (US 5,778,880, hereinafter "Chen"). Granek discloses the essential features of the claimed invention except for an electrode surface made of conductive rubber. Chen teaches a similar electrophysiology system comprising electrodes with a surface made of conductive rubber (4) to provide the predictable results of accurately acquiring body signals with a flexible and inexpensive interface. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Granek's invention by providing electrodes with a surface made of conductive rubber to provide the predictable results of accurately acquiring body signals with a flexible and inexpensive interface.

**23.** Claims 4, 11, and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Granek in view of Matsumura et al. (US 6,161,036, hereinafter "Matsumura"). Granek discloses the essential features of the claimed invention except for an electrode made of conductive plastic, or an electrode comprising copper. Matsumura teaches a similar



electrophysiology system comprising electrodes comprising conductive rubber (col. 7, line 17) to provide the predictable results of accurately acquiring body signals with a flexible and inexpensive interface, and an electrode comprising copper (col. 7, line 17) to provide the predictable result of a highly conductive signal path. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Granek's invention by providing electrodes with made of conductive plastic to provide the predictable results of accurately acquiring body signals with a flexible and inexpensive interface, and an electrode comprising copper to provide the predictable result of a highly conductive signal path.

#### ***Response to Arguments***

**24.** Applicant's arguments with respect to claims 1-11 and 21-29 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL KAHELIN whose telephone number is (571)272-8688. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Kahelin/  
Examiner, Art Unit 3762